Course-section: BIOS 215-002
Term: Spring 2022
Location: ABL 128/129 and Zoom
Meeting Time: varies with laboratory section

INSTRUCTOR CONTACT INFORMATION

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YOUR PLACE AND PARTICIPATION IN SCIENCE IS IMPORTANT!

Who we are in place and time – The state of Texas, where Rice University is located, has been a meeting and trading location for Indigenous tribes including the Apache, Caddo, Comanche, Kiowa, and Wichita. Three federally recognized tribes and two state-recognized tribes currently reside in Texas.

The study of biology like many fields has historically excluded people of color, women, and other groups. This lack of diversity has likely led to missed opportunities for exploration – an exclusion of talented people who might have made great contributions, not just costly to "science" but for those individuals as well – and to delayed censure of unethical research practices, such as applications of eugenics and recruitment of prisoners for research trials. We acknowledge that even Rice University missed opportunities by excluding students of color until the 1960s. While the field is now more inclusive, it is important to learn about these examples and the impact of this history on the current field. The questions we choose to ask in science are influenced by those who are included in the scientific endeavor. ***We want and need you included in this conversation!***

TO PARAPHRASE JOHN DONNE, "NO ONE IS AN ISLAND"

The BioSciences DEI mission statement can be found at https://biosciences.rice.edu/diversity-equity-and-inclusion. As the instructor of this course, I am committed to its principles. We all bring different experiences and ideas that enrich this class. As a participant you should strive to honor the diversity of the class. If there are aspects of the instruction of this course that result in barriers to your inclusion in course content, please contact us. In this classroom you have a right to define your identity, but we stress that no student is ever presumed to speak on behalf of any group or anyone other than themselves. Everyone has the right to be addressed by the name and pronouns that correspond to their gender identity, including non-binary pronouns. Rosters do not list gender or pronouns so you may be asked to indicate the pronouns you use so that we do not make assumptions based on your name and/or appearance/self-presentation (you are not obligated to do so). If you use a chosen name, please let us know. Chosen names and pronouns are to be respected at all times in the classroom. Mistakes in addressing one another may happen, so we encourage an environment of openness to correction and learning. We will not, however, tolerate repeated comments which disrespect or antagonize anyone who has indicated pronouns or a chosen name. Chosen name and personal pronouns may evolve over time, so if at any point during the semester you would like to be addressed differently, please let us and the other teaching assistants know.

YOUR IDEAS AND OPINIONS ARE IMPORTANT AND NEEDED IN OUR PEDAGOGICAL APPROACH

This semester I will be conducting a study looking at teaching and learning. The purpose of this study is to determine the factors that influence teaching effectiveness and learning. Your participation in this study will last for the duration of the current semester and will entail activities (**reflections** and **surveys**) no different from regular activities you would otherwise engage in as part of the course. If you would like more information, please ask. If you would like to opt out of the study, please talk to me as soon as possible. Opting out does not excuse you from doing the activities, but your collected data will not be used and will be deleted. All protocols were approved by the Institutional Review Board of Rice University (Protocol FY2017-294).

COURSE OBJECTIVES AND LEARNING OUTCOMES

BIOS 215 is an opportunity to learn and practice important skills related to teaching and professional behavior while assisting experienced faculty with course instruction and feedback to students. It is also an opportunity to provide leadership by example to other teaching assistants and students in our courses. In this course, undergraduates who have previously excelled in BIOS 211 *Experimental Bioscience* will develop teaching skills by leading. These activities are designed to benefit students presently taking BIOS 211 and will be performed under the guidance of the instructors teaching the course. **Overall learning goals and intended learning outcomes for teaching assistants are outlined below.**

Goal 1: Recognize the importance of timely attention to responsibilities

We rely heavily on teaching assistants to provide our undergraduates the best possible laboratory experience. Timely feedback to individual students is particularly important, as it is through such feedback that they learn how to improve. Failure to meet these responsibilities can negatively impact a student's grade. A responsible teaching assistant shows up on time for laboratory posts individual feedback on notebook pages no later than midnight, five days past the relevant laboratory session provides the instructor with immediate weekly feedback on individual student performance responds to instructor queries and requests for information (usually sent by email) within 24 hours anticipates personal issues (*e.g.*, illness or rescheduled classes or interviews) and makes arrangements with instructor to ensure that responsibilities are met.

Goal 2: Understand how quality instruction and feedback can improve student performance

A successful learning experience is far more likely when observant and interactive teaching assistants provide timely and effective instruction and feedback. An effective teaching assistant interacts proactively with students in the laboratory rather than waiting for them to take the initiative guides students with regard to laboratory safety provides individual performance comments, both orally and written, that reflect substantive constructive feedback engages students when answering questions and providing instruction handles conflicts effectively takes the necessary initiatives to ensure fairness by, for example, working with other TAs to ensure that grading criteria are consistent from one TA to another and one laboratory section to another interacts with students in a professional manner, treating all of them equally with courtesy and respect.

Goal 3: Recognize the necessity of teamwork in mentoring and in assessing student performance

Teamwork is essential to the successful realization of all of these goals. A teaching assistant who is a good team player contributes to discussions about experimental procedures posts queries and responds to queries about grading criteria and/or laboratory procedures when appropriate and/or necessary takes the initiative to refresh past understanding of methods, procedures, explanations, and theory promotes mastery of the material covered by the course by regularly communicating with one another shares specific observations and experiences with the rest of the team when necessary, picks up responsibilities of other TAs who are unable to carry them out readily handles an emergency or hazardous situation in the instructor's absence.

REQUIRED EXPERIENCE

Participation in this course is by permission of instructor only and is based on performing well in the associated laboratory course (BIOS 211, BIOS 212, FWIS 115, and/or NSCI 120) in a prior semester.

COURSE RESPONSIBILITIES AND ATTENDANCE POLICIES

Teaching assistant responsibilities will differ based on the capacity for which you are a TA:

In-person TAs will be in the lab as safety monitors and help answer questions. There is the modification that you may also have the opportunity to help out teams of students by being technicians where you (and instructors) help finish an experiment. You will not be responsible for designing an experiment but merely to do straightforward things that are

not “science-y”; you will be their hands and students will have to provide the exact protocol. Additional examples of responsibilities include setting up/cleaning up the laboratory, making reagents, demonstrating procedures, interacting with individual students, providing feedback on laboratory notebooks and posters, answering questions both inside and outside of class, and evaluating student laboratory performance.

You are expected to wear proper attire to laboratory, including **closed-toe shoes** and **long pants or skirts**, and to use appropriate personal protective equipment (PPE) as instructed, which may include face masks based on the current university policies. Additionally, they must adhere to safety guidelines when working in the laboratory and when operating autoclaves. Students are strongly encouraged to complete safety training for general laboratory safety and biosafety offered through Environmental Health & Safety. Students are also expected to be familiar with the information in the BIOS 211 TA Manual.

Virtual TAs will be online via Zoom (or other apps; ask Dr. Catanese) where you are holding “office hours,” where you are available to answer questions predominantly about the competencies. You may also monitor the discussion forums (if used) and help maintain an FAQ page on the BIOS 211 Canvas page. Additional examples of responsibilities include describing or demonstrating procedures virtually, interacting with individual students, providing feedback on laboratory notebooks and posters, and answering questions during class.

All TAs: Attendance at all laboratory meetings and performing all duties required of the associated laboratory course are essential. Absences can be excused due to illness or unexpected/unavoidable emergencies; students are expected to contact the instructor by e-mail or in-person as soon as possible in the event of an emergency.

ASSESSMENT AND GRADING

TAs will complete reflections throughout the semester; each graded for participation and completion. Evaluation of student performance will be based on attending class meetings and performing required duties responsibly and effectively. There are no required exams or papers. This course may be repeated for credit.

RICE HONOR CODE

In this course, all students will be held to the standards of the Rice Honor Code, a code that you pledged to honor when you matriculated at this institution. If you are unfamiliar with the details of this code and how it is administered, you should consult the Honor System Handbook at http://honor.rice.edu/honor-system-handbook/. This handbook outlines the University's expectations for the integrity of your academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process.

Teaching assistants are expected to observe and maintain the Rice Honor Code in all of their class-associated activities both inside and outside of the classroom. TAs are expected to familiarize themselves with the Honor Code Policy for BIOS 211 and to ask the instructor for clarification of any parts that are confusing or unclear. **You should not share or upload online any materials from this semester.** If a BIOS 215 student witnesses or suspects a violation of the Honor Code for the laboratory course, he/she should submit a letter of accusation, along with all relevant evidence, to honor@rice.edu as soon as possible; if he/she would like to remain anonymous he/she may describe the incident to the instructor, who will then submit the accusation on their behalf.

DISABILITY SUPPORT SERVICES

If you have a documented disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with the Disability Resource Center (Allen Center, Room 111 / adarice@rice.edu / x5841) to determine the accommodations you need; and 2) talk with the instructor to discuss your accommodation needs.

PSYCHIATRIC / MENTAL HEALTH DISABILITIES

Reports suggest that about 1 in 5 college students suffers from anxiety, depression, bipolar disorder or other mental

health issues. Students with psychiatric disabilities are entitled to reasonable academic accommodations as provided by the American Disabilities Act (ADA) of 1990 and 2008 amendments. You do not need to have had your disability diagnosed before your arrival at Rice. To receive accommodations, you must register with the Disability Support Services (DSS) Office in the Allen Center. A Rice student requesting accommodations must self-identify to the DSS office and provide recent documentation of their disability. This documentation is used to establish the Rice student as an individual with a disability and provides rationale for reasonable accommodations. This process requires evaluation and documentation so do not wait until the last minute, speak with your healthcare professional or consult with the Student Wellbeing and Counseling Center (https://wellbeing.rice.edu). You will not need to disclose your specific disability with your instructor, but documentation is required to secure accommodations.

BASIC NEEDS SECURITY / STUDY SKILLS SUPPORT

Food and housing insecurity can make learning difficult. Students who are having trouble making ends meet are encouraged to find support through the Access and Opportunity Portal (https://aop.rice.edu) and resources provided by the Office of Student Success Initiatives (https://success.rice.edu). Study skill support and additional resources can be found on the SSI website. Your College Magisters may also be able to provide additional assistance.

TITLE IX RESPONSIBLE EMPLOYEE NOTIFICATION

Rice University cares about your wellbeing and safety. Rice encourages any student who has experienced an incident of harassment, pregnancy discrimination or gender discrimination or relationship, sexual, or other forms interpersonal violence to seek support through The SAFE Office. Students should be aware when seeking support on campus that most employees, including myself, as the instructor, are required by Title IX to disclose all incidents of non-consensual interpersonal behaviors to Title IX professionals on campus who can act to support that student and meet their needs. For more information, please visit safe.rice.edu or email titleixsupport@rice.edu or Title IX Compliance Officer Richard Baker.

DEAN OF UNDERGRADUATES GUIDELINES FOR RELIGIOUS ACCOMMODATIONS

Both Rice's policy of non-discrimination on the basis of religion and our core values of diversity and inclusion require instructors to make reasonable accommodations to help students avoid negative academic consequences when their religious obligations conflict with academic requirements. Every reasonable effort should be made to allow members of the university community to observe their religious holidays without jeopardizing the fulfillment of their academic obligations. It is never acceptable for an instructor to compel a student to choose between religious observance and academic work. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the period of absence. It is the obligation of students to provide faculty with reasonable notice of the dates of religious holidays on which they will be absent.

Note: *The information contained herein this course syllabus, other than university policies, may be subject to change with reasonable advance notice, as deemed appropriate by the instructor. As always, please feel free to email and/or talk with your instructor.*